TMDL Workshop 10/29/01
Questions and Comments
Lewiston, ID

TOTAL DISSOLVED GAS TMDLs

Oregon and Washington will issue TMDLs for their respective states on TDG on the Columbia and Snake River Mainstem. EPA will be issuing the TDG TMDLs on river segments where tribal water quality standards apply. Below are informal responses to questions and comments raised at the TMDL workshops held in Lewiston, Idaho, October 29, 2001, and Pasco, Washington, October30, 2001.

These questions and comments have helped to alert the states and others issues of concern to the community. They have already influenced some of the thinking regarding the TDG TMDLs. The meetings, questions and comments were informal in nature.

Formal Public Comment Periods will allow the public to make verbal and/or written comments on the draft TMDLs. All formal comments will be addressed in the final TMDLs under "Response to Comments".

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TEMPERATURE TMDLs

EPA has provided informal responses to questions and comments raised the TMDL workshops held in Lewiston, Idaho, October 29, 2001 and Pasco, Washington, October30, 2001. These responses have been shared wirh the states and tribes for their review.

The questions and comments have helped to alert EPA and others to issues of concern to the community. They have already influenced some of the thinking regarding the Temperature TMDLs.

The draft TMDL will be made available to the public in the Spring of 2002. EPA will hold a public comment period which will allow for verbal and/or written comments on the draft TMDL . Additional information on this process will be forthcoming.

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The meetings, questions and comments were informal in nature. The questions and comments have been divided into two categories: 1) questions for immediate clarification, and 2) questions for on-going consideration.

The questions for immediate clarification have been answered in writing. These are questions that can currently be answered with a high degree of certainty. The remaining questions have been listed without written responses. Answers to these questions would

be speculative or may require further modeling or data. Even if questions have not been answered, they have been thought provoking and some have already resulted in re-thinking of aspects of the Temperature TMDLs.

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1) What is the relationship between temperature and increased predation?

Increased temperature disrupts and can impair salmonid spawning and growth. At the same time, increased temperatures provide a more favorable environment for salmon predators such as the northern pike minnow. Increased temperature can affect fish behavior making them more susceptible to predation.

2) Have you considered transportation as an alternative to spill?

The TMDL establishes the level of reduction in pollutant loading required to meet water quality standards. The implementation plan to be developed by the States will address how these load reductions are to occur and how water quality standards are to be attained. Fish transportation is a measure for assisting with fish passage, it is not a water quality improvement measure.

3) Because reducing spill is key to dealing with TDG, discussion should be given to transportation.

The mechanisms to be utilized to reduce TDG will be addressed in the States' implementation plans. In the 2001 Biological Opinion covering the operation of the Federal Columbia River Power System, NMFS and the federal dam operators sought implementation programs which would spread the risk to salmon during passage of the dams among transportation, spill and juvenile fish bypass systems. The States will utilize the work completed as part of this Biological Opinion in developing the implementation plans for these TMDLs.

4) Who will be developing the implementation plans for Oregon, Washington and Idaho?

The individual states will develop their respective implementation plans.

5) Will the Temperature TMDL address temperature issues in the transportation sector (i.e. barges)?

No, the TMDL addresses the in-stream river temperature. Fish transportation is conducted by the Corps of Engineers under the Endangered Species Act (ESA) and not directly related to actions necessary to attain water quality standards or the allocations established by the TMDL.

6) Will the Temperature TMDL address temperature issues in the fish ladders?

We are currently evaluating options for how passage facilities such as fish ladders and holding facilities may be addressed in the TMDL .

7) Will the Corps continue to rely on waivers to exceed 110% of saturation for TDG? Will the TMDL change this process? The Corps has expressed their desire to continue the use of waivers. These waivers are granted by the individual states through their water quality standards programs. However, the long-term goal of the TMDL is compliance with the 110% criteria without the use of waivers.

8) Standards for temperature vary by time of the year and location. How does this relate to the needs of aquatic species? State water quality standards are designed to protect the needs of aquatic species throughout the year.

9) What is the magnitude of variation in temperature in the Snake and Columbia Rivers? Since the temperature of the Snake and Columbia Rivers varies in time (diurnally and seasonally) and space (laterally, longitudinally, and vertically), there is no short answer to this question. EPA has attempted to characterize different aspects of the temperature regime in its Problem Assessment document, currently posted on the Columbia River TMDL website.

10) How will you determine what changes need to take place at Lewiston, Idaho since all of the measurements are taken at the dams? The RBM-10 temperature model will be used to estimate temperature reductions needed in all reaches of the river. Model output can therefore be utilized to quantify the reductions required at Lewiston. The state will utilize this information to develop implementation plans specific to the various sources and/or reaches.

11) Human population increased between the first and second 18-year periods you examined in the problem assessment. Have you considered a correlation between population growth and an increase in water temperature?
We can acknowledge that population growth has certainly affected hydropower use, land use, etc.

12) Will dams be considered point sources or non point sources? Will they be allocated loads or waste loads? How will this translate into implementation? Dams are point sources and therefore will be given waste loads. Since dams are not subject to the NPDES permit program, the states will work with the dam operators through the state implementation plans.

13) Will the burden for implementation fall on point sources since dams are very difficult to regulate? What will the implementation plan look like? Until the allocations are established, it is difficult to predict the amount of reduction that will be required from individual sources.

14) Standards for TDG need to be established where the fish are. How do you decide where to monitor? Monitoring sites will be determined cooperatively between the states, tribes, and EPA. Most monitoring sites are selected where beneficial uses are threatened or impaired and where the velocity of the river does not threaten human safety and the integrity of the monitoring equipment.

16) If the TMDL will not ultimately change standards, what will the TMDL do?
The TMDL will provide a plan that quantifies the amount of reduction needed from each source in order to achieve the current standards. As such, it provides a framework for planning needed implementation actions.

17) When can we expect to see a fully monitored river system (not just scroll case data)? The system presently has real time monitors in forebays and tailraces. The data can be viewed at the Corps website: www.nwd-wc.usace.army.mil.

18) Will the Upper Snake be considered in this TMDL?
A separate TMDL for the Snake River from RM 409 near Adrian, Oregon to RM 188 immediately above the Salmon

River inflow is currently being developed by Oregon and Idaho. This TMDL will address the interface between the two TMDLs.

19) Who has to agree before implementation can take place?

Each state will work with the affected management agencies and the public during the development of their implementation plans. Decisions on activities to be completed and a timeline for implementation actions will occur during plan development.

20) Who has to agree this TMDL is right?

All work on these TMDLs is being conducted in a cooperative effort between the states of Idaho, Oregon, Washington and EPA in consultation with Columbia Basin Tribes. EPA will issue the temperature TMDL for Washington and Oregon waters and therefore is responsible for ensuring it is issued pursuant to applicable statutory and regulatory requirements. The States have this responsibility for TMDLs that they issue, such as the TDG TMDLs and the temperature TMDL for Idaho waters. For TMDLs issued by the State, EPA also has responsibility to ensure that all statutory and regulatory requirements are contained in the TMDL as part of the approval process. EPA will be consulting and coordinating with Columbia Basin tribes for EPA actions and decisions.

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TMDL QUESTION FOR ON-GOING CONSIDERATION

This question has been listed without written responses. An answer would be speculative or may require further modeling or data. These types of questions and comments have already helped to alert EPA and the states to understand and consider issues of concern to the community. Some have already influenced aspects of the approach to the TMDLs.

The draft TMDLs will be made available to the public. Public comment periods will be help to allow for verbal and/or written comments on the draft TMDLs. Additional information on this process will be forthcoming.

Have you considered the effects of the Columbia Basin Project on temperature increase? What about loss of ground water return flow (seepage)?